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Relative Obliqueness and Subcategorization Inheritance in Old English Preposition-Verb Compound Verbs

Gwang-Yoon Goh

This paper addresses two main questions about Old English (OE) preposition-verb compound verbs (P-V CVs): first, how can we explain the contribution of the nonhead P to the subcategorization of the whole CV while maintaining the traditional priority of the head V, and second, what determines the case government of OE P-V CVs when more than one case is logically possible? On the basis of an 'obliqueness hierarchy' which results in an enriched notion of case feature, I show that not only the contribution of the nonhead P but also the case government of OE CVs can be explained under the traditional notion of the head without weakening the true priority of the head by resorting to an ad hoc redefinition of the head or to a formal mechanism which has not been fully justified.

1. The Subcategorization Inheritance in Old English Compound Verbs

1.1. The Head of Old English P-V Compound Verbs [1]

One general assumption in morphology is that words have, as phrases do in syntax, a head or a central element, intended to explain the relation between a word and its parts. In general, the head of a word is defined as one of the constituent elements of the word which determines the properties of the whole word. In OE P-V CVs, the right-hand

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[1] P represents a preverb (e.g. *wiþ* of *wiþ-cweðan*) which is assumed to be originally a preposition in its underlying representation. On the other hand, V indicates a simplex verb, and Vi and Vt mean an intransitive verb and a transitive verb, respectively. See section 3.3 for a more elaborate definition of P-V CVs.

member determines most important properties of the whole compound (mother), including categorial features, as in the following:[2]

(1) Category of OE P-V CVs

[[æfter]P-[hyrigean]V]V 'to follow an example'
[[from]P-[swican]V]V 'to desert from'
[[geond]P-[drencan]V]V 'to drink excessively'
[[þurh]P-[drifan]V]V 'to drive through'
[[under]P-[þegnian]V]V 'to serve under'
[[wiþ]P-[standan]V]V 'to hinder, withstand'
[[ymb]P-[sælan]V]V 'to tie around'

(2) Morphological Class of OE Verbs and P-V CVs [3]

	Infinitive	1st (sg.) Pret.	2nd (pl.) Pret.	Past Ptc.	Class
a.	(i) hieran 'to hear'	hierde	hierdon	hiered	W1
	(ii) ofer-hieran 'to overhear'	ofer-hierde	ofer-hierdon	ofer-hiered	W1
b.	(i) bregdan 'to pull'	brægd	brugdon	brogden	S3
	(ii) ofer-bregdan 'to cover'	ofer-brægd	ofer-brugdon	ofer-brogden	S3
c.	(i) faran 'to go'	for	foron	faren	S6
	(ii) ofer-faran 'to go over'	ofer-for	ofer-foron	ofer-faren	S6

As we can see in (1), the categorial feature percolates to the mother (CV) from V. In the same way, examples in (2) show us that the CVs are different in their morphological classes from one another even though they share the same preposition and show the same verb class as their corresponding simplex verb, which means again that V determines the morphological class of the whole CV. Furthermore, as is well known, the right-hand member of the CV determines many other inherent features such as tense, aspect, person, and number; the left-hand member P does not influence the determination of those features. Therefore, we can reasonably say that the right-hand member V is the head of the OE P-V CV and expect that this head will also determine other important features like the subcategorization of the whole compound.[4]

1.2. The Contribution of Nonheads to the Subcategorization Inheritance

One conspicuous difference between OE and Modern English (MnE) is that in OE CVs could be made very freely by combining a preposition and a verb. Furthermore, unlike MnE in which the meanings of P-V CVs are not usually obtained from their components in a compositional way, most OE P-V CVs are more transparent so their meanings can be derived from the meanings of their parts. One may observe in this regard that many OE CVs behave compositionally in their argument subcategorization as well, that is, the prefix (i.e. P) as well as the head (i.e. V) contributes to the subcategorization or argument structure of the CV. Thus, unlike our general expectation about the behavior of the head and a nonhead, many OE P-V CVs show that although the

[2] Kim (1997) identified the head of OE P-V CVs in a similar way.
[3] I follow the classification of Mitchell (1992: 36).
[4] By identifying V as the head of P-V CVs, I don't intend to mean that all words have a head or that there is a unique way to identify its position within (complex) words.

head V determines most of the morphosyntactic features of the whole CV, the valence of the CV is jointly determined by the head V and the nonhead P. This point is well demonstrated by the comparison of the respective case government of P-V CVs and their component V and P (Kim 1997).[5] Consider the following examples:

(3) *gan* vs. *ymb-gan*

a. se þe fylgeþ me ne *gæþ* he on þeostro
he who followsme not goes he into darkness
'he who follows me shall not go into darkness' (BlHom 103.31)

b. *Ymb-eode* þa ides Helminga duguþeond geogoþe dæl æghwylcne,
around-went then lady of-Helmings veterans and youths part each [acc]
'then the lady of the Helmings went around every group
of the veterans and the youths' (Beo 620-1)

(4) *ymb*

a. Aras þa se rica, *ymb* hine rinc manig,
rose then the noblearound him [acc] man many
'the noble and many a man around him rose up' (Beo 399)

b. he ferde eft siððan *embe* sumere neode
he went again afterwards about some need [dat]
'afterwards he went again about some need' (ÆCHom ii. 508.15)

Gan in (3a) is an intransitive verb which does not take any object, whereas *ymb-gan* in (3b) is a transitive verb which takes an accusative object. Note that the preposition *ymb* takes an accusative or dative object in (4). The observation about the case government in OE P-V CVs in (3) and (4) shows us that the subcategorization of the P is percolated to that of the whole CV. Furthermore, in these examples, we can see that the meaning of the CV is so transparent that it can be compositionally obtained from its constituent parts. Thus, the meaning of *ymb* 'around' combines with the meaning of *gan* 'to go' to produce the compositional meaning of the whole CV *ymb-gan* 'to go around'. This observation, which shows that nonheads, along with the head, can participate in determining the argument structures of (OE) P-V CVs, is common also in MnE and many other languages and goes against our expectation about the behavior of the head and a nonhead.

The following examples are more interesting because they show that a preposition combines with a transitive verb which can take its own NP object and that both the head and the nonhead contribute to the argument structure of the whole CV.

(5) *cweðan* and *wiþ-cweðan*

a. in leohtehim þa word *cweþaþ*
in light him [dat]those words [acc] speak
'they will speak those words to him in glory' (Christ 401)

[5] Campbell (1959: §72 fn.1) seems to be the first to observe the contribution of the prepositional prefix to the subcategorization of the whole compound verb in OE. This observation was also made by De la Cruz (1973: 161, 164), Mitchell (1985: §§1065-6), Kim (1997), and others.

b. gif inc hwa ðæs *wiþ-cweþe*
if you-two [dat] anyone that [gen] contradicts
'if anyone contradicts you about that' (BlHom 71. 1 [BT])

Wiþ-cweðan 'to refuse, contradict' in (5b) is a ditransitive and takes dative and genitive at the same time, whereas *cweðan* 'to speak' can take either dative and accusative at the same time or accusative alone but never takes genitive. Therefore, we can infer that the genitive case would come from P and this is ascertained by the following examples showing the case government of *wiþ*, which takes genitive, dative, or accusative:

(6) *wiþ*

a. micelliget fleah of ðære dune swilce flan
great lightning flew from the mountain like arrows
wið þæs hæðenan folces
against the heathen folk [gen]
'great lightning flew from the mountain like arrows against the heathen folk'
(ÆCHom i. 504.29)

b. se dæg cume þe he sceole *wið* þæm lichomon hine gedælon
the day come that he must against the body [dat] him separate
'the day shall come that he must separate himself from the body'
(BlHom 97.20)

c. he forgifeþ eall swa hwæt swa þes middangeard ær
he forgives all whatsoever this world previously
wiþ hine æbyligðageworhte
against him [acc] offenses made
'he shall forgive all offenses whatsoever this world has previously committed against him' (BlHom 9.12)

Our observation so far is well verified by the case government patterns of verbs and prepositions which are based on Bosworth & Toller (1898) (henceforth, BT) and Mitchell (1985: §§1092, 1178). The general subcategorization pattern of the above CV, the simplex verb, and the preposition can be described as follows:

(7) Subcategorization of *wiþ-cweþan*, *cweþan*, and *wiþ*

a. wiþ-cweþan [dat, (gen)] 'to contradict (sb) [dat] with regard to (sth) [**gen**]' [6]
b. cweþan [acc, (dat)] 'to say, speak (sth) [acc] to (sb) [dat]'
c. wiþ [acc/dat/**gen**]

The above subcategorization pattern as well as the examples considered shows that the CV *wiþ-cweþan*, as a ditransitive, takes dative and genitive at the same time and that the genitive case does not come from the simplex *cweþan* but from the preverb *wiþ*. Therefore, we can conclude that the nonhead (P) as well as the head (V) participates in the determination of the argument structures of the P-V CVs in OE, and this is quite

[6] V[dat, gen] (= V[COMPS<NP[dat], NP[gen]>]) means that the given verb takes dative and genitive NPs at the same time, while V[acc/dat] indicates that the V takes accusative or dative but not both at the same time. In particular, the first case in the subcategorization of a ditransitive P-V CV indicates the case which comes from the verb part, regardless of the surface word order in OE. We can easily distinguish it by the related meaning and function in most cases. (sb) and (sth) indicate a person and a thing, respectively.

different from our expectation based on the traditional notion of the head. Thus, the consideration so far raises two interesting questions to be answered by any reasonable morphological theory which assumes the notion of the head.

First, how can we explain the contribution of the nonhead to the subcategorization of the whole compound in OE P-V CVs? Is there any notion of the head available in current morphological studies which can help us out of the apparent dilemma between the contribution of the nonhead P and the priority of the head V? Second, how is it that a particular case is used in a CV in the situation in which more than one case is logically possible? In particular, OE has some well-attested, ditransitive P-Vt CVs, whose simplexes are monotransitive or different in their subcategorization from the corresponding P-V CVs, and they show some peculiar behavior in their case inheritance. That is, when they are ditransitive, some OE P-V CVs such as *wiþ-bregdan*, *wiþ-cweðan*, and *wiþ-standan* take only [dat, gen] and they do not take other logically possible combinations of cases: [dat, acc], [dat, dat], [acc, gen], etc.[7]

In this paper, I will show that by better understanding the case assigning properties of the head, the interesting case government patterns of OE P-Vt CVs as well as the contribution of nonheads can be explained under the traditional notion of the head without weakening the priority of the head by resorting to an ad hoc redefinition of the head or to a formal mechanism which has not been fully justified.

2. Previous Studies

2.1. Observation about the Subcategorization Inheritance

There have been several studies which note the prepositional function of the prefix P in OE P-V CVs, that is, the contribution of nonheads (P) to the subcategorization of the whole CVs, in which P brings about and is responsible for the difference in valence or subcategorization between a simplex V and the corresponding P-V CV. Thus, Campbell (1959: §72 fn. 1) says that "prepositional adverbs" (i.e. prefixes of P-V CVs) can "have a function approximating to that of prepositions, the object being under their government". De la Cruz (1973: 161, 164) also observes that both P-V CVs and prepositional verbs in OE and Middle English (ME) can permit a difference of object with respect to the simplex. Mitchell (1985: §§1065-6) makes a similar observation about the behavior of prepositional prefixes of P-V CVs and explains what sort of verb results from the combining of the two elements (P and V).

Although their observation seems to be quite reasonable and correctly points out the contribution of the prefix to the argument structure of P-V CVs, none of them provide any generalization or explanation beyond the observation. Furthermore, their observation

[7] Such ditransitive P-Vt CVs as *wiþ-cweðan*, in which P (*wiþ*) as well as V (*cweðan*) contributes to the subcategorization of the whole CV, do not seem to be very common in OE. However, OE has many instances of such P-Vt CVs and other languages including Greek and Latin show similar examples (e.g. *συπ-πεμπω* 'to send sb_1 with sb_2' from *συν* 'with' and *πεμπω* 'to send sb/sth', and *επι-βουλευω* 'to plot against sb < to plan (sth) against sb' from *επι* 'against' and *βουλευω* 'to plan sth'). See Visser (1963-73: §677), Mitchell (1985: §§1092, 1178) for the subcategorizations of the above three P-V CVs with the P *wiþ*. Kim (1997) discusses the three OE P-Vt CVs and several Greek and Latin examples.

misses the prepositional function of a prefix when it combines with a (mono)transitive verb to form a ditransitive verb, as in *wiþ-bregdan*, *wiþ-cweðan*, and *wiþ-standan*.[8]

2.2. Redefining the Notion of the Head

Many studies have attempted to account for a complex word and its head and their relationship, which can be applied to the explanation of the argument structures of (P-V) compounds and their subcategorization inheritance. They can be divided into two main groups, depending on how the priority of the head is maintained. The first group, including Williams (1981), Lieber (1983), Selkirk (1982), Di Sciullo & Williams (1987), and others, attempts to keep the priority of the head mainly by redefining the notion of the head. Their basic idea in 'headness' is that the head of a word determines the properties of the whole word by percolating its properties to the word but that a nonhead does not have an influence. In contrast, the second group, including Toman (1987), Lieber (1992), and Kim (1997), tries to accommodate the contribution of nonheads by employing a formal device which can make the head have the control of the subcategorization inheritance.

Williams (1981: 248) proposes the Right-hand Head Rule (RHR) to define the notion of the head. According to his RHR, the head is always the rightmost constituent of the morphologically complex word. Thus, the category of each compound (e.g. [sweet$_A$ talk$_N$]$_N$) is determined by the right-hand member (e.g. [talk$_N$]). However, we can easily find many counterexamples to this RHR. For example, in [be-[witch]$_N$]$_V$, [be-[guile]$_N$]$_V$, [en-[large]$_A$]$_V$, and [en-[able]$_A$]$_V$, the left-hand member determines the category, or more precisely, the right-hand member does not determine the category.[9]

In order to resolve this problem, Selkirk (1982: 20) provides a revised RHR, in which the notion of head is defined in terms of types and feature complexes rather than the position of a constituent, so that category-changing prefixes can be treated as heads. The point is that the head should have a complex of all relevant features shared by the mother.

(8) Right-hand Head Rule (revised)

In a word-internal configuration,

where X stands for a syntactic feature complex and where Q contains no category with the feature complex X, X^m is the head of X^n.

On the other hand, Di Sciullo & Williams (1987) replace the original notion of the head of a word by a so-called "relativized head" in order to avoid the problem in Williams (1981). Now, the head is defined as the rightmost constituent of a word which is specified for the property in question. This new notion is basically the same as

[8] However, Mitchell (1985: §§1902, 1178) provides the subcategorization patterns of all the three CVs and their components P and V, from which the prepositional function of P can easily be shown in each CV.

[9] Williams (1981: 250), however, notes the presence of *en*-X compounds (e.g. *en-rich* and *en-slave*) and treat them as systematic exceptions to the RHR.

Selkirk's (1982) revised RHR in that it allows any element (notably, the left-hand member) relevant to the given property to percolate its property to the mother.[10]

In the case of P-Vi CVs (e.g. *be-gangan, ymb-gan*, etc.), either of the two revised approaches seems to work, since the feature (i.e. argument) of the left-hand member can percolate to the mother (CV) and determine the argument structure of the whole CV. However, in the case of P-Vt CVs such as *wiþ-cweðan*, in which the argument structure is determined by both of the members, no approaches based on the above three versions of the head seem to be able to explain the subcategorization of CVs. That is, no matter how we define the notion of the head, both P and V in P-V CVs cannot be the head at the same time, unless more than one head is allowed or the whole P-V CV is treated as the head.[11]

Lieber (1983: 253) provides a similar but more specified proposal for the head and its role in the argument structure of compounds, in which she says that the features of the right-hand member percolate up to the mother node. Furthermore, she claims that the right-hand stem determines not only the category but also the argument structure of the compound, while the left-hand member does not pass any of its features up to the mother (compound), only satisfying its own argument structure within the compound. Again, it is clear that this claim is not valid: in many OE P-V CVs and even in many similar MnE P-V CVs (e.g. *over-come, over-lay, over-lap*), not only the right-hand member (V) but also the left-hand member (P) participates in determining the argument structure of the whole compound.

In short, the problem with all the above approaches is that no matter how we define the head and its position, it is difficult to provide a solid basis for an effective and reasonable account of the contribution of nonheads in the subcategorization inheritance.

2.3. Accommodating the Contribution of Nonheads Through a Formal Mechanism

Instead of proposing a new definition of the head, Lieber (1992), following Toman (1987), distinguishes "percolation", the passing of morpho-syntactic features between two different nodes, from "inheritance", an operation within the argument structures of a nonhead and the head, thereby trying to provide a way of accommodating the contribution of nonheads. That is, in this mechanism, the head (V) can inherit the argument of the nonhead (P) and then percolate it to the mother (CV).

Kim (1997) discusses some OE P-V CVs, in which the value of the subcategorization feature is not determined solely by the head. Her observation about the case government of OE P-V CVs is quite right, especially in that the CVs must assign the case from the simplex V with the case assigned by the P as optional (pp. 44-56). Furthermore, she

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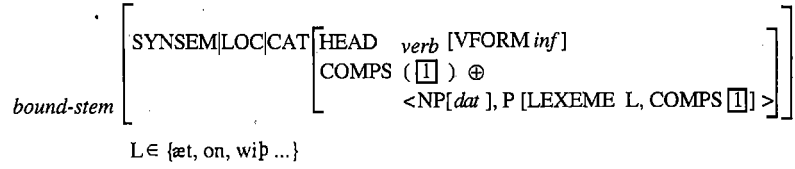
[10] See Anderson (1992: 310-19) for several other problems which the relativized head has.

[11] Multiple heads have been proposed for some problematic cases such as so-called 'dvandva' compounds and coordinating compounds (e.g. *hydrogen-oxygen* in *hydrogen-oxygen mixture*), in which more than one participant in a compound is assigned head status. However, OE P-V CVs in question don't seem to need to be treated as such a case at all, since the two components in OE P-V CVs are very different in their status: V is dominant in almost every respect. Furthermore, note that such a proposal, even for 'dvandva' cases, brings about complications in other parts of the description or the theory, as pointed out in Zwicky (1993: 292).

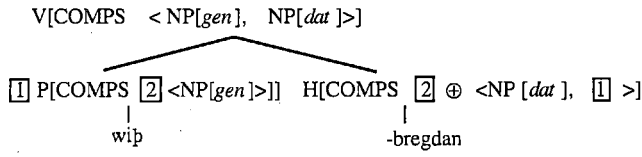
provides a way of making the head control the subcategorization inheritance by adopting the mechanism of argument attraction, which is proposed by Hinrichs and Nakazawa (1989, 1994) within the framework of Head-Driven Phrase Structure Grammar.

Although the approaches in this line allow us to nicely accommodate the contribution of the nonhead by means of a formal device such as argument attraction, they are not without problems. Above all, they still have to explain what makes the inheritance (or argument attraction) possible and what controls it, and in particular, what the role of the head is in the relevant process including the subcategorization inheritance. This problem becomes clear when they are applied to the case government of OE P-V CVs: they cannot explain why the CVs such as *wiþ-cweðan* and *wiþ-bregdan* take a particular (set of) case(s) when more than one case is logically possible. Consider the following inheritance mechanism for *wiþ-bregdan* which is proposed by Kim (1997: 61-61):

(9) a. Revised Partial Feature Structure Description of *bregdan*



b. COMPS Inheritance in P-Vt Compounds



Even though the actual element inherited is the COMPS list of the nonhead, the inheritance mechanism above enables the head to be in control of the inheritance, making the CV *wiþ-bregdan* have the COMPS list of <NP[gen], NP[dat]> (or <NP[dat]>). Note, however, that although the nonhead *wiþ* as a preposition governs an NP[dat] or an NP[acc] as well as an NP[gen], the head *bregdan* always inherits an NP[gen] from the nonhead. This selective case government in the subcategorization inheritance cannot be explained by the given formal mechanism itself. This means that although Kim (1997) may maintain the head-to-mother percolation of the subcategorization list by rather artificially making the inheritance of the subcategorization list of the nonhead always be by way of the head, she still has to explain what really controls the subcategorization inheritance, resulting in the peculiar case government pattern of the P-V CV.

Note that Lieber's (1992) proposal of inheritance and percolation can be formalized in a similar way and has the same problem because her proposal cannot explain why the

head inherits an NP argument of a particular case, either. Thus, their account should be determined to be an approximation of a complete account because although their formal mechanism enables the head to appear to be in control of the subcategorization inheritance, it gives us little explanation of why it is that the theory of subcategorization inheritance is constituted in the way it is. This makes us doubt whether they really can maintain the true priority of the head.

So far, we have considered various approaches which are relevant to the subcategorization inheritance of OE P-V CVs, and found that there is no previous study which can reasonably account for or be applied to the questions at issue. In the following section, I will present an alternative account of the subcategorization inheritance in OE P-V CVs, in which, without any ad hoc definition, the head in the traditional sense is still in control and determines the contribution of nonheads. Thus, I will motivate and propose an 'obliqueness hierarchy' (OH) among the NP arguments of OE verbs and prepositions. Then, in order to represent the information about the OH in the subcategorization of the head, I will enrich, but not try to redefine, the notion of the head with respect to the case feature. This enriched interpretation of the case feature based on relative obliqueness of NP arguments will enable us to explain the contribution of nonheads to the subcategorization inheritance of OE P-V CVs without weakening the priority of the head.

3. Obliqueness Hypothesis

3.1. Two Strict Distinctions among Old English NP arguments

There have been many studies which attempt to explain the syntactic and semantic contribution of OE morphological cases and most of those studies have tried to explain what the OE cases encode on the basis of traditional notions of case government. Thus, OE cases might be explained in terms of the grammatical relations they encode, that is, the nominative encodes subjects, the accusative direct objects and the dative indirect objects. However, few of the explanations based on this traditional view have been very successful in accounting for what OE cases really encode, because even though such accounts may be appropriate in many cases, they are inappropriate in many other instances, making it very difficult to formulate a generalization which can be applied to various uses of OE non-subject cases. In particular, the object marking of a lot of OE verbs is so variable that we can find such alternative case markings even in one and the same sentence, as follows:

(10) a. se fæder wiþsoc *his bearne*, and þæt bearn wiþsoc
the father renounced his child [dat] and that child rejected
þone fæder, and æt nextan ælc freond wiþsoc *oðres*,
the father [acc] and at last each friend refused another [gen]
'the father renounced his child, and the child rejected
the father, and then all friends refused each other'
(ÆlS, i. 23: 110 [BT: 1255; Plank (1983)])

b. gefylgdon *hine* vel *him*
followed him [acc] or him [dat]
'they followed him or him' (Lindisf. Gosp. [Plank (1983)])

The above examples clearly show that a verb varies in assigning a case to its direct object without involving any important difference in grammatical relationship and

meaning in kind. How can we explain these alternative case markings for the same verb? Should we say that it was just a free variation which doesn't make any significant difference? One might argue that such alternations in OE object case marking come from uncertainties in the use of OE object cases and that they especially reflect the loss of case distinction in relatively late texts. However, this does not seem to be the case, since such variation in object cases is extremely pervasive in the early OE period and characteristic even of other early Germanic languages (Plank 1983: 246).

Although grammatical roles and functions are variably encoded in OE cases, there are two rigid distinctions among OE NPs with respect to their cases and governors. Above all, there is a strict distinction among the NP arguments of a verb, especially between accusative NPs and NPs in other cases, which can be clearly seen in their behavior in passivization.[12] OE has a syntactic passive like MnE.[13] The norm for this OE passive is that the accusative object of the active verb becomes the subject of the passive, which is called 'personal passive', as in (11a). Otherwise, the impersonal passive is the rule. That is, when an active verb takes a dative or genitive NP object, the NP has to remain in the oblique case without becoming the subject of the passive sentence, as in (11b) and (11c).

(11) a. *he* mid eotenum wearð on feonda geweald forð forlacen
he [nom] among giants became into enemy's power further betrayed
'among the giants, he was well betrayed into the power of the enemy'
(Beo 902-3)

b. *Him* weorþeð blæd gifen!
him [dat] became blood given
'he was given blood' (Christ 877)

c. Forðæm se ðe *his* ær tide ne tiolað,
because his [gen] before time not provide (for)
þonne bið *his* on tid untilad,
then (it) is his [gen] on time unprovided
'because they will not provide for him before time
then it will be unprovided in respect of him when the time comes'
(Bo 67. 11 [Mitchell 1985: §849])[14]

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[12] This strict distinction between accusative and other cases can also be applied to NP arguments of prepositions since OE P-V CVs such as *ymb-sprecan, ymb-locian, wiþ-springan, wiþ-fleogan,* etc. whose sole arguments come from the prefix will show the same difference in passivization. That is, even though a prepositional argument could not be passivized at all in OE, an inherited argument (from P) in P-V CVs did not have any problem with passivization even in OE.

[13] OE has two ways to represent the passive. That is, besides the syntactic passive, there is one OE verb which has a synthetic passive, that is, *hatte* 'is (was) called'. On the other hand, Impersonal *man* for indefinite agency is often used in the nominative singular with an active verb form as an equivalent of the passive voice.

[14] Although the OE verb *ti(o)lian* 'to strive after, provide (for)' takes genitive, example (11c), which Mitchell provides as an example of the impersonal passive for the genitive object, may be problematic because the word *untilad* 'unprovided' can be regarded as an adjective rather than a past participle form. Unlike the impersonal passive for the dative object, clear examples of the impersonal passive for the genitive object seem to be rare (Mclaughlin 1983: 62). This rareness is compatible with the distinction between the dative case and the genitive case, which is reflected in the obliqueness hierarchy proposed in (14).

This distinction between accusative NPs and dative or genitive NPs must have been extremely strong since no reasonable evidence has been found that this rule had exceptions. Thus, OE does not even have the indirect passive, which means only an accusative NP can become a passive subject.[15] This distinction is also maintained even when one and the same verb has two different sets of NPs as its arguments, as in the examples below. Note that the different argument structures are associated with different meanings of the verb, which are illustrated in (12b) and (12c), respectively.

(12) ofteon [16]

a. Informal Argument Structures of *ofteon*

(i) 'to take, deny (sth) [acc] from/to (sb) [dat]'
(ii) 'to deprive (sb) [dat] of (sth) [gen]'

b. (i) ... þæt ðam godum þe hit gehealdan willað,
... that to the pagan gods [dat] which it to hold wish,
ne sy *oftogen* seo gastlice deopnyss
not may-be denied the spiritual profoundness [nom]
'... that to the pagan gods which wish to hold it,
the spiritual profundity may not be denied' (ÆCHom ii. 96.4)

(ii) ðe bið seo bodung *oftogen*
to whom is the message [nom] denied
'to whom the message is denied' (ÆCHom ii. 530.30)

c. (i) ... ac him wæs ða *oftogen* ælces fodan six dagas
... but him [dat] was then deprived everyfood [gen] six days
'... but he was deprived of all food for six days'
(ÆCHom i. 570.30)

(ii) Blindsceal his eagna þolian,
blind must his eyes dispense with,
oftigen biþ him torhtre gesihþe
deprived is him [dat] clear vision [gen]
'a blind man must dispense with his eyes,
(and) he is deprived of clear vision' (Max i. 39)

On the other hand, OE has another conspicuous distinction between verbal arguments and prepositional arguments, which is also clearly revealed in passivization. That is, passivization in OE is allowed only for a verbal argument. In other words, there is no prepositional passive (PreP) in OE, at least, not in the same form as the MnE PreP. Thus, OE does not have the passive type *He was laughed at.* This type of passive begins to appear about 1300, but remains rare until the end of the 14th century (Mustanoja 1960: 440-1).[17]

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[15] The indirect passive is the passive type *I was told a story*, which becomes a feature of English usage in the 15th century (Mustanoja 1960: 440-1).

[16] The examples are from Mitchell (1985: §858) but the MnE translation is mine.

[17] The PreP is not found in what Denison calls "Standard Average European", which still has different morphological cases for NPs just as in OE, though there is something similar in mainland Scandinavian languages (Denison 1993: 125).

(13) a. Bot nu þan am i *after send*
'but now when I am after sent (= sent for)'
(a1400 (a1325) Cursor 14216 [Denison 1993: 126])

b. Litel is he louid or *lete by* þat suche a lessoun techiþ
'he is little loved or thought of who teaches such a lesson'
(c1400 (a1376) PPl. A (1) 11. 29 [Denison 1993: 126])

In sum, there are two strict distinctions among OE NPs: one is among the NP arguments of the same head or governor with respect to their cases and the other is between verbal arguments and prepositional arguments. Whatever makes this distinction possible among OE NPs, we can call it Ω and say that the easier for an NP to be passivized, the less Ω that NP is. Then by using this property of OE NPs, Ω, we can describe the above two distinctions among OE NPs with respect to their morphological cases and governors as follows: first, accusative NPs are less Ω than dative or genitive NPs, and second, regardless of their cases, NPs are less Ω when they are verbal arguments than when they are prepositional arguments.

3.2. Obliqueness Hierarchy among Old English NPs

The property Ω and the distinction among OE NPs in terms of Ω seem to be very closely related to the notion of 'obliqueness'. The notion of 'obliqueness' here is similar to the traditional grammatical notion of obliqueness, which can be roughly defined as follows: the less oblique an NP argument is, the more central it is for the meaning or relationship expressed by the head (i.e. verb) of the relevant VP and the more likely for it to be selected by the head. Note, however, that the obliqueness of NPs is defined here with regard to their morphological cases, not their grammatical roles or relationships.[18]

Above all, accusative case in OE usually encodes the direct object of a verb, the least oblique non-subject argument, which is generally encoded by accusative case. Furthermore, OE accusative NPs are more likely to be selected by a verb than dative or genitive NPs. According to Mitchell (1985: §1092),[19] OE has a very small number of verbs (about 180 verbs in his list) which take genitive or dative, whereas there are a great number of transitive verbs, which can take accusative alone or along with other cases. That is, accusative case is much more likely to be selected by V than any of the other object cases and thus we can say that accusative NPs are less oblique than dative or genitive NPs.[20]

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[18] The representation of the grammatical relation by means of relative obliqueness can be found in many studies including Keenan & Comrie (1977, 1979), Comrie (1981: 148-55), and Pollard & Sag (1987: 67-72, 117-121, 1994). Note, however, that their hierarchies mainly based on grammatical functions are difficult to be properly applied to the NP arguments which have the same grammatical function (i.e. the direct object) but alternative case markings, as is shown in (10). Thus, unlike most others, the relative obliqueness here is defined with regard to the morphological cases of NP arguments rather than their grammatical roles or functions.

[19] Visser (1963-73: §§ 323, 378-392) shows a similar list of OE verbs which take dative or genitive but not accusative.

[20] Furthermore, the common object case (= [ACC]) in MnE, which was mostly accusative in OE (if the relevant NPs have their counterparts in OE), can be considered less oblique than prepositional dative (= [DAT]) and genitive (= [GEN]), which are usually represented by *for*+ or *to*+NP phrases and *of*+NP phrases, respectively (i.e. periphrastic dative and genitive (Mustanoja 1960: 74, 95)), because the direct

Thus, there is a general hierarchy among the NP arguments with respect to the likeliness of their being selected by a verb or appearing as a verbal argument, which is directly related to their centrality in the relationship expressed by the verb.[21] This tells us that other things being equal, the less oblique (in its morpho-syntactic case) an NP is, the more general it is in its distribution. For example, a subject NP of the nominative case is mostly likely to appear in any sentence. Even though we can find impersonal constructions which don't have a subject (more precisely, a nominative NP) in languages such as OE, this seems to be still true. In the same way, an object NP of accusative case was much more general in its appearance than other object NPs of more oblique cases like dative and genitive.

Furthermore, this seems to be compatible with our general observation about OE P-V CVs: other things being equal, a less oblique case is favored over a more oblique case.[22] Also, in many languages such as English and German, most verbs (and prepositions as well) which used to govern a genitive NP object now either take a less oblique case or have been replaced by more widely used alternative expressions (Hammer 1991: 369, 444). This general tendency to less oblique expressions is closely related to the behavior of OE P-V CVs.

On the other hand, it seems to be generally acknowledged that verbal arguments are less oblique than prepositional arguments in the sense that they are more central for the relationship expressed by the head (i.e. verb) of a sentence and more likely to be selected by the head. In the same way, in MnE, prepositional phrases (PPs) are usually less central and often optional and prepositional arguments are more difficult to passivize than verbal arguments. This seems to be still true even when along with a verbal argument a PP can be selected as a complement by the head verb, as in *John gave a book to Mary*, because for many native speakers, the omission of the PP (*to Mary*) is more tolerable than that of the verbal argument (*a book*), not to mention the difference in passivization.

Moreover, among prepositional NP arguments, NPs indicating 'time' (e.g. *at the time*) are very difficult to passivize or to move out of PP leaving their governor (i.e. preposition) stranded in *wh*-relative clauses, whereas NPs indicating 'place' are relatively easy to passivize or to move with the resultant prepositional stranding in *wh*-relative clauses (e.g. *The room was slept in*).[23] This resistance to being passivized seems to be closely related to the obliqueness of an NP, because prepositional arguments indicating 'place' are less oblique than those indicating 'time' in the sense that the former can be selected by some verbs such as *put*, while few verbs subcategorize for the latter.

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object is much more likely to be selected by V and also because when an NP [ACC] (usually as a direct object) and a PP [DAT/GEN] occur together, unlike the NP [ACC], which is obligatory and almost always passivizable, the prepositional dative (or genitive) is often optional and not passivizable.

[21] One may think about an obliqueness hierarchy including other arguments of a verb such as clauses, infinitive phrases, etc. This is a subject for further research.

[22] Note also that even though OE has many prepositions which can take either accusative or dative, in most cases, they tend to take dative rather than accusative, whereas many P-V CVs tend to take accusative rather than dative, even with a P which usually takes dative as a preposition. This difference suggests that the prepositional argument is very oblique and that once it is accommodated into the new argument structure of a P-V CV, what is important is the relative obliqueness among the arguments involved and its maintenance, but not the absolute (or formal) obliqueness, that is, the original case form.

[23] For the difference in prepositional stranding, compare *This is the place which I ate dinner at* with ??*This is the time which I ate dinner at.*

In short, it seems clear that the property Ω, which makes possible the strict distinction among OE NPs with respect to their cases and governors, is closely related to the obliqueness of NPs. In particular, this relationship between the property Ω and obliqueness is most vividly revealed in passivization. Thus, in terms of obliqueness, we can describe the distinction among OE NPs with respect to the property Ω: the less Ω an NP is, the less oblique it is.[24] Finally, in terms of the notion of obliqueness, the distinction among OE NPs can be generalized as follows: first, accusative NPs are less oblique than dative or genitive NPs, and second, regardless of cases, verbal arguments are less oblique than prepositional arguments. On the basis of this generalization about OE NPs and their obliqueness, I propose the following 'Obliqueness Hierarchy (OH)' among OE NP arguments with respect to their cases and governors:

(14) Obliqueness Hierarchy of Morphological Cases among OE NP arguments [25]

a. Nom (subject) < Acc < Dat < Gen (< Instr.)
b. Verbal arguments < Prepositional arguments

3.3. The Maintenance of the Obliqueness Hierarchy in P-V Compounding

Compounding, in this paper, is defined as "the creation of new words through a more syntactic combination of pre-existing (full) words" (Anderson 1992: 399). This typical definition, above all, means that the original fundamental syntactic and semantic relationship which holds between the two relevant component elements (i.e. V and P) of a P-V CV is maintained after compounding. That is, even though compounding can often involve some change in the syntactic or semantic relationship between two components, the change usually means a certain degree of abstractness but not a change in the original core relationship itself. Thus, we define P-V CVs in OE as compounds that result from combining an independent preposition and an independent verb.

As noted in section 1.2, when P and V combine to form a P-V CV, the original NP object of P can become part of the arguments of the CV. In this case, a given complex word can be considered a P-V CV only when the prefix has a pre-existing counterpart preposition which is closely related in form and meaning, while the basic meaning of the simplex verb is maintained. Furthermore, an argument of CV can be said to come from P only when we have enough evidence for the original subcategorization of that NP argument by P in terms of their semantic relationship and in many cases, the case government as well, and when it is clear that the argument does not come from the simplex verb. What this means is that at least in the case of P-V CVs, in order to say anything reasonable about the inheritance of an argument and its case, the basic pattern of the semantic relationship expressed by V and P should be maintained after V and P

[24] One might be against my relating or identifying the property Ω with obliqueness. But what is crucial is not the relationship between Ω and obliqueness but the fact that there is a very strict two-way distinction among OE NPs with regard to their cases and governors, which is clearly revealed in passivization, and that, if necessary, 'obliqueness' in this paper can be used for referring to the property Ω, which makes possible such a distinction.

[25] $Case_1$ < $Case_2$ means that $Case_1$ is less oblique than $Case_2$. The distinction in obliqueness between dative and genitive is not as clear as the distinction between accusative and other object cases. The hierarchy (Dat<Gen) mainly reflects the relative frequency of each case and relative passivization possibility. This seems to be also the case between MnE prepositional dative (*to* NP) and genitive (*of* NP).

combine to become a P-V CV even if the CV comes to have a degree of abstract or figurative meaning through compounding. This is because only when there is a sufficient degree of transparency in the semantic and syntactic structure can there be an objective criterion for determining the inheritance of the argument (and its case) in OE P-V CVs.[26]

Note that in spite of the inconsistent encoding of kinds of meaning or grammatical relationship in OE object cases, the distinction among cases or the relative obliqueness of NPs encoded in cases is very systematic and regular, because, as we already have seen, this difference in obliqueness among NPs is unexceptionally applied in determining the passivization possibilities of NP arguments. Thus, it is very likely that the obliqueness of NPs is more likely to be maintained in P-V compounding than any other semantic information.

There are several other reasons why the compounding of V and P in OE would not change the fundamental semantic relationship, especially the relative obliqueness among NPs. Above all, as we already considered, prepositional arguments are more oblique than verbal arguments regardless of the cases involved. Then, it would be very unlikely for a transitive verb to subcategorize for (as its original complement) an argument which is less central for the meaning involved while through compounding inheriting a more central argument from other less central parts of a given sentence. On the contrary, the original argument of a simplex verb should still be more important or central for that verb and less oblique than the inherited prepositional argument even after V and P combine to form a P-V CV as long as the basic pattern of the original semantic structure is maintained. This conclusion would be more plausible if we consider that there was a higher degree of semantic and/or morpho-syntactic transparency in OE P-V CVs than in MnE P-V CVs.[27]

In this connection, there is one important thing about maintaining the obliqueness hierarchy (OH) among NPs especially when V inherits its second argument through P-Vt compounding. The obliqueness of an NP is encoded in its morphological case and the OH among NP arguments of the same governor is determined solely by their morphological cases, whereas a verbal argument is less oblique than a prepositional argument, regardless of their morphological cases. Thus, if an argument of P is inherited into the new argument structure of a P-Vt CV, then the OH between the (less oblique) original verbal argument and the (more oblique) original prepositional argument should be maintained in the new argument structure and, therefore, the case of the inherited prepositional argument should be appropriate in order not to change the original relative obliqueness between the two NP arguments. I believe that what is important here is maintaining the OH between the two NP arguments rather than preserving the original (surface) case of the prepositional argument, as we will consider later in this paper.

Most importantly, all the characteristics of OE NPs and their behavior so far considered are determined and controlled by the head (V). This is because it is the head itself that represents the syntactic and semantic relationship in question including the OH among its relevant arguments, and encodes the relationship in its NP arguments,

[26] This might seem to be circular, but it is not, because my argument is based on morphology. Above all, what is clear is that only when there is a sufficient degree of transparency, at least, in the meaning of V and P, can we reasonably say anything about the subcategorization inheritance in P-V CVs. Otherwise, any argument about the contribution of nonheads (P) would be meaningless.

[27] See Ogura (1995) for a discussion of some evidence about the transparency of OE P-V CVs.

especially through their morphological cases, by subcategorizing for relevant arguments of particular cases. This means that the head of OE P-V CVs has more significance than we have often assumed and suggests that the contribution of nonheads in the subcategorization inheritance and the case government in OE P-V CVs can be explained under the traditional notion of the head by more properly reflecting the properties of the head as they are rather than providing an arbitrary definition of the head.

As for OE morphological cases and their inheritance in P-V CVs, in particular, if a certain case is not marked for a verb in its subcategorization and is less oblique than the case marked for the same verb in the lexicon, then the case in question is very likely to be negative in the sense that it does not occur with the given verb even through P-V compounding, as long as the compounding does not involve any significant change in the original fundamental syntactic and semantic relationship between the NP arguments involved.[28] Thus, along with the OH in (14), I propose the following re-interpretation of the notion of the head with respect to the case feature:

(15) Re-Interpretation of the Case Feature (> Enriched Notion of the Head)

a. Any morpho-syntactic case (of an argument of a verb) which is unmarked in the subcategorization of a verb is *negative* if it is *less oblique*, and *potential* if it is *more oblique* than the morpho-syntactic case of an argument which is specified as a marked value in the subcategorization of the given verb.

b. Informal Redefinition of the Argument Structure of OE Verbs [29]

(i) Auxiliary Verb [SUBCAT < NP [+nom], +VP >]

(ii) Vi = V [SUBCAT < NP [+nom] >]
= V [SUBCAT < NP [+nom], ((NP [¿acc / ¿dat / ¿gen])) >]

(iii) V[acc] = V [SUBCAT < NP [+nom], NP [+acc] >]
= V [SUBCAT < NP [+nom], NP [+acc], ((NP [¿dat / ¿gen])) >]

(iv) V[dat] = V [SUBCAT < NP [+nom], NP [+dat] >]
= V [SUBCAT < NP [+nom], NP [+dat], ((NP [-acc, ¿gen])) >]

(v) V[gen] = V [SUBCAT < NP [+nom], NP [+gen] >]
= V [SUBCAT < NP [+nom], NP [+gen], ((NP [-acc, ¿dat])) >]

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[28] This is mainly because P-V compounding can help a relevant verb to inherit a more oblique prepositional argument at most, as long as some other more important factor is not involved. In this connection, note that although a prepositional dative (e.g. <u>*to* NP</u> [DAT]) can be added to the MnE structure 'V + accusative NP' (e.g. *told the story* [ACC]), as in *John told the story to Mary*, the accusative *the story* cannot be added to the MnE structure V + prepositional dative (e.g. *spoke <u>to Mary</u>* [DAT]), as in **I spoke to Mary the movie*), in which the prepositional genitive <u>*about the movie*</u> [GEN] is acceptable, as in *I spoke to Mary about the movie*.

[29] The double parentheses indicate that relevant case features are specified but unmarked, inverted question mark (¿) means that relevant cases are not realized yet but are potential, and finally, the plus (+) and minus (–) indicate marked and negative cases, respectively.

For the representation of the subcategorization list of OE verbs, I generally follow the framework of Head-Driven Phrase Structure Grammar (HPSG) in the version of Pollard & Sag (1987, 1994). Note that although HPSG has no treatment of 'potential (case) features', there is nothing incompatible with such a proposal in that framework.

(vi) Impersonal Verb [SUBCAT < (NP [-nom, +α]) >]
= V [SUBCAT < (NP [-nom, +α]), ((NP [-β, ¿δ])) >]
where [-β] < [+α] < [¿δ].

In addition, in order to make the above two proposals (i.e. the OH and the enriched notion of the head) effective in the compounding of OE verbs and prepositions and, more than anything else, to secure the priority of the head, I propose the following 'feature conservation hypothesis' (FCH) in P-V compounding.[30]

(16) Feature Conservation Hypothesis in P-V Compounding

a. No feature can be added to or subtracted from the original features of the head.
b. 'Feature changing' should be the realization of an unrealized potential feature which is already specified as an unmarked value in the head.

The FCH, along with the OH and the enriched notion of the head, produces the following results in connection with the subcategorization inheritance in OE P-V CVs. First, the above three concepts will provide a reasonable justification for the subcategorization inheritance and so-called argument composition as well, which often seems to have been employed as a convenient mechanism for the formalization of some problematic linguistic phenomena without providing any principled explanation. Thus, the OH and an enriched notion of 'head' give us an explanation of why and how the head can inherit the arguments of a nonhead.

Second, the FCH can then become one of the principles which constrain the subcategorization inheritance (or argument composition), which otherwise doesn't seem to have any well-motivated constraints. Thus, as far as compounding of OE P-V CVs is concerned, the subcategorization inheritance (or argument composition) should be allowed only when it does not violate the FCH.

Finally and most importantly, our hypothesis can provide a principled account of the subcategorization inheritance and case government in OE P-V CVs: it explains the contribution of a nonhead without weakening the priority of the head. As a matter of fact, it will consolidate the priority of the head. Note also that the approach proposed here is compatible with Lieber's (1992) and Kim's (1997) proposals and their formalization *and* can deal with the problem (i.e. the selective case inheritance in P-Vt CVs) found in their accounts.

In the next section, by examining many relevant OE verbs and sentences, I will demonstrate that my proposal is strongly supported by the extant OE data. In particular, I will show how my alternative approach based on the relative obliqueness (which I call the 'obliqueness hypothesis') can answer several interesting questions about the behavior

[30] In fact, the FCH can be considered the implementation of the OH and the enriched interpretation of the case feature and it can be subsumed under a similar but more general assumption which can be found in many syntactic frameworks. For example, the Projection Principle of Government-Binding (GB) theory requires lexical properties to be projected to all levels of syntactic representation (Horrocks 1987: 99), and the Head Feature Principle and the Subcategorization Principle play a role in HPSG theory roughly comparable to that of the Projection Principle of GB.

of OE CVs, including the peculiar case government in *wiþbregdan*, *wiþcweþan*, and *wiþstandan*, which do not seem to be answered satisfactorily in any previous studies.

4. Verifying the Obliqueness Hypothesis

4.1. Negative Evidence

One clear prediction from the hypothesis proposed so far is that if a simplex verb subcategorizes for only (an NP of) dative or genitive case in the lexicon, then it does not inherit accusative through compounding. Thus, a P-V CV formed by that verb and a preposition will not take accusative either, because accusative is less oblique than either dative or genitive.

In order to verify this prediction, I examine the OE simplex verbs which are specified for genitive on the one hand, and those which governs dative or genitive on the other. My list of dative- or genitive-taking verbs comes from Mitchell (1985: §1092), in which Mitchell says that his list aims at completeness.[31] I consider every genitive- or dative-governing simplex verb in the list and checked all the relevant verbs in Bosworth & Toller (1898) (BT), Toller (1908-21) (BTs, henceforth), Campbell (1972) (BTe, henceforth), and Hall (1960) in order to see if any of them combines with a preposition to form a CV which takes a less oblique case than the case specified for the original simplex verb.

In the explanation of derived P-V CVs, I include derived monotransitive P-V CVs. This is because although monotransitive P-V CVs can mean that V is used as intransitive or that P is used just adverbially, the relevant derivation or compounding can also mean that the original prepositional object is overt while the original verbal object is implicit just as a transitive verb can be used absolutely.

As for the question of what prefixes should be dealt with as prepositions, I generally follow the criteria suggested in de la Cruz (1975) and Mitchell (1978). Thus, I assume that the prefix (P) of the P-V CV is a preposition (only) when it has the same form as an independent preposition and its meaning is (etymologically) related to that of the corresponding preposition. Note that this implies it should be clear for the relevant NP argument selected by the whole P-V CV to come from the P.[32]

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[31] See the appendixes for the list of the verbs and their derivational complex verbs, along with the relevant explanations. Mitchell (1985) has about 180 verbs which take dative or genitive and among them there are 112 simplex verbs, which I examine in this paper.

[32] In particular, de la Cruz (1975: 47) treats the prefixes of *on-* and *to-* as inseparable prefixes since they have no etymological prepositional counterpart and Mitchell (1978: 246) also treats the prefix *to-* as an inseparable prefix because there is no corresponding phrasal use of the simple verb + preposition and also because the corresponding complex word is different in meaning from combinations of the simplex verb and the preposition.

On the other hand, although de la Cruz (1975) treats *be-* as an inseparable, non-prepositional prefix since it often gives an intensification to a verb or has a privative sense, the prefix shows the same or similar semantic and syntactic contribution as the corresponding preposition *be* in many instances (e.g. *be-bindan* 'to bind about', *be-cidan* 'to complain of', *be-faran* 'to go around', *be-licgan* 'to lie around', *be-sittan* 'to sit around', *be-smeagan* 'to consider about', etc.). Similarly, although the prefix *on-* is often meaningless and mostly corresponds to Old High German *int-* (or German *ent-*), which expresses the idea of escaping, going away, or removing sth (Hall 1960, BT), we can also find many instances of the prepositional prefix *on-* with the meaning of the preposition *on* '(up)on, onto, against, toward, in respect to, or according to'

Some interesting results from the investigation of the target data are the following. Above all, as expected from the proposed hypothesis, it was found that most of the target verbs do not make many compound or complex verbs. In fact, as we can see in the list given in the appendixes, they usually have no more than one or two derivational complex verbs, which in most cases are not P-V CVs but just combinations of an inseparable prefix (e.g. *a-*, *ge-*, *mis-*, etc.) and a given simplex verb. This becomes more interesting if we note that many intransitive or accusative-governing simplex verbs form a lot of complex verbs, many of which are P-V CVs, as in the following: [33]

(17) OE Intransitive and Monotransitive Verbs and Their Derivational Complex Verbs

a. Intransitive Verbs

(i) cuman 'to come'
a-, an-, be-, for-, fore-, forþ-, ge-, in-, of-, ofer-, ofer-be-, on-be-, ongean-, þurh-, to-, to-be-, under-, up-cuman

(ii) cweþan 'to say, speak' (also as a transitive verb)
a-, æfter-, be-, bi-, for-, fore-, ge-, hearm-, on-, onbe-, onge-, to-, wiþ-, wearg-, wiþer-, yfel-cweþan

(iii) faran 'to travel'
a-, be-, for-, forþ-, ge-, geond-, in-, of-, ofer-, on-, oþ-, þurh-, to-, ut-, wiþ-, ymb-faran

(iv) gangan 'to go'
a-, æt-, be-, bi-, for-, fore-, forþ-, ful-, ge-, in-, of-, ofer-, on-, ongean-, þurh-, to-, under-, up-, ut-, wiþ-, ymb-, ymbe-gangan

b. Monotransitive Verbs

(i) don 'to do, make'
a-, be-, for-, ge-, in-ge-, of-, of-a-, ofer-, on-, on-ge-, oþ-, to-, to-ge-, un-, under-, up-a-, ut-a-, wel-, yfel-don

(ii) habban 'to have'
a-, æt-, be-, for-, ge-, of-, on-, wiþ-, wiþer-, ymb-habban

(iii) healdan 'to hold'
a-, æt-, an-, be-, for-, ge-, mis-, of-, ofer-, on-, oþ-, to-, ymb-healdan

(iv) settan 'to set, place'
a-, an-, be-, bi-, for-, fore-, ge-, in-, of-, ofer-, on-, to-, un-, wiþ-, ymb-settan

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(e.g. *on-a-sendan* 'to send into', *on(be)blawan* 'to blow upon/into', *on-bugan* 'to yield to, bow to' *on-hlinian* 'to lean on', *on-sawan* 'to introduce into', *on-sittan* 'to seat oneself in', *on-wadan* 'penetrate into', etc.). Thus, this paper will treat *be-* and *on-* as prepositional prefixes when it is clear that they are closely related to the corresponding prepositions in their semantics or when the complex words (i.e. *be*-V or *on*-V) have the corresponding phrasal counterparts (i.e. V+*be* or V+*on*).

[33] Note also that the productivity of a Vi and Vt in compounding can also be predicted by the proposed hypothesis. For example, a Vi has as its SUBCAT value 'V [SUBCAT < NP [+nom], ((NP [¿acc / ¿dat / ¿gen])) >]' and so it has an accusative, dative or genitive NP as its potential argument, which can be provided by almost any OE preposition and its object NP without destroying the original relative obliqueness among the NP arguments involved.

Second, there are a few derivational complex verbs or P-V CVs which may appear to take a less oblique case (i.e. accusative) as a monotransitive verb (V[acc]) or a ditransitive verb (V[dat/gen, acc]). However, none of them are problematic, because their simplex verbs take genitive or dative only when they have a special (non-default) meaning while, with a default meaning, they are mainly used as a transitive verb [acc], which in fact participates in the compounding in question. For example, the simplex verb *þicgan* [gen] has *oþ-þicgan* [acc, dat] and this may seem to be a counterexample since the P-V CV takes less oblique cases than the genitive case for the simplex verb. However, the simplex *þicgan* takes genitive when it means 'to partake of sth' but, with the (default) meaning 'to take', it is used as a transitive verb [acc]. Furthermore, the accusative NP argument of the P-V CV comes from the latter use of the simplex verb, which is clear from the meaning of the P-V CV *oþ-þicgan* 'to take sth [acc] from sb [dat]'.[34]

Another interesting point in this connection is that the OH is also generally observed in most complex verbs which are not P-V CVs but come from the combination of an inseparable prefix and a genitive- or dative-governing simplex verb. Thus, as long as the basic semantic relationship expressed by the simplex verb is maintained after compounding, those complex verbs (e.g. *mis-limpan* [dat] 'to turn out badly for someone' from *limpan* [dat] 'to happen to someone') at least have a strong tendency to avoid taking or composing a less oblique case by usually taking genitive or dative. This seems to be because the syntactic and semantic relationships expressed by those simplex verbs are not appropriate for subcategorizing for or inheriting any less oblique object than the ones which are originally selected by the simplex verbs.

On the other hand, if we should find a P-V CV[dat, acc] which comes from V[dat] and P[acc] or a P-V CV[gen, acc] which comes from V[gen] and P[acc], this would be a real counterexample. Such P-V CVs could come from the compounding of P[**acc**/(dat)/(gen)] and either Vt[(**dat**)/(**gen**)] or Vt[acc/(**dat**)/(**gen**)]. However, none of dative- or genitive- only-governing verbs (i.e. Vt[(dat)/(gen)]) form any such P-V CVs. Furthermore, I have examined OE verbs which can take accusative and genitive at same time on the one hand and OE verbs which can take accusative and dative at the same time on the other. The target OE verbs are collected from Visser (1963-73: §§679, 682, 696).[35] Visser has about 76 OE verbs [acc, gen] (or [gen, acc]) and about 253 OE verbs [acc, dat] (or [dat, acc]). Among the verbs [acc, gen], no CVs are to be found which come from a preposition and a simplex verb.[36] Among the verbs [acc, dat], there are some P-V CVs whose simplex is not ditransitive; however, there are no P-V CVs which come from P[acc] and V[dat].

Thus, the results of the investigation of the relevant OE verbs are compatible with the predictions from the proposed hypothesis. They show that there are no verbs [dat/gen] which combine with a preposition [acc] to make a P-V CV [dat/gen, acc] and this strongly suggests that OE has, at most, a very small number of P-V CVs [dat/gen, acc]

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[34] For potentially problematic cases and their accounts, see the appendixes.

[35] Mitchell (1985) does not include verbs [dat, acc] in his list of verbal rections (§1092) but refers to Visser (1963-73).

[36] About 20 verbs [acc, gen] have a prefix whose form is similar to an independent preposition. That is, there are about 16 verbs [acc, gen] which consist of *be-* and a verb (e.g. *be-dælan*, *be-hatan*, *be-niman*, etc.) and 5 verbs [acc, gen] which consist of *on-* and a verb (*on-cunnan*, *on-munan*, *on-sacan*, *on-secan*, and *on-wendan*). The prefixes *be-* and *on-* in all those verbs, however, are used as inseparable prefixes, which are usually privative or just meaningless.

which come from a preposition [acc] and a simplex verb [dat/gen]. Most importantly, all the above facts constitute strong evidence for the obliqueness hypothesis, which says that genitive- or dative-governing simplex verbs are not compatible with an NP argument which is less oblique than the NP arguments that they originally subcategorize for.

One might justifiably argue that not only do we not have intuitions about OE, but also that the extant OE data are not complete enough to prove any principle or rule like the obliqueness hypothesis. In fact, Mitchell (1985) and Visser (1963-73), even though they are among the most extensive collection of the relevant data at present, would not exhaust any type of OE verbs which we must examine for verifying the proposed hypothesis. Furthermore, my investigation of those verbs is mainly based on the above two books, as well as BT, BTs, BTe, and Hall (1960). However, the negative evidence provided in this section (i.e. the results from the investigation of OE verbs [dat/gen], verbs [acc, gen], and verbs [acc, dat]) is strong enough for us to conclude that the obliqueness hypothesis based on the OH and the FCH is at least a strong tendency in OE verbs and their subcategorization inheritance, because the hypothesis turns out to be valid for the large set of OE verbs which are available at present. More importantly, there is no reason to give up the priority of the head in our account of the subcategorization inheritance of OE P-V CVs unless we find sufficient evidence from further OE data that the contribution of nonheads cannot be explained on the basis of the properties of the head itself.

4.2. Positive Evidence and Choosing from More Than One Case

4.2.1. Monotransitive P-Vi CVs Whose Simplex Verb is Intransitive

Many OE P-V CVs are formed from a preposition and an intransitive verb. In fact, this kind of P-V CV is not characteristic of OE because even in many other languages including MnE there are many P-V CVs of this type (e.g. *overcome*, *overlay*, *overlap*, *overshine*, *overspread*, *undergo*, *underlie*, *underline*, *underpass*, *underwrite*, etc.). In this case, as already discussed in section 2.2, the contribution of a nonhead to the subcategorization inheritance of the whole CV can be explained very easily without giving up the priority of the head. Thus, Selkirk (1982) and Di Sciullo & Williams (1987) would say that P is the head since they define the head as the rightmost constituent of a word which is specified for the property in question (i.e. the subcategorization of the NP object and its case).

On the other hand, according to the alternative approach, i.e. the obliqueness hypothesis, the head is still the simplex verb and the contribution of a nonhead is explained by the subcategorization of the head verb, which originally has the potential of inheriting an argument which is more oblique than the markedly specified argument. Thus, in the case of P-Vi CVs, the Vi subcategorizes for some potential but unrealized argument as well as the marked subject NP[nom] and when it is required to inherit an additional argument through compounding, it chooses a potential argument of a certain morphological case from the nonhead P, mainly depending on the grammatical function and meaning it encodes.[37]

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[37] In her discussion of OE P-Vi CVs, Kim (1997; 46) says that as for *begangan* and *ymbgan*, although the dative case is taken by the corresponding preposition, the extant data do not show any instances of dative case for those compounds but they show only instances of accusative case, another case governed by the preposition. It seems to be generally true that other things being equal, the accusative case is favored over other oblique cases. This general tendency in fact reflects the obliqueness hierarchy proposed in this paper.

The account of the subcategorization inheritance in P-Vi CVs may not seem to be very interesting since at first glance there does not seem to be much difference between the obliqueness hypothesis and other headness-based approaches. That is, Selkirk (1982) and Di Sciullo & Williams (1987) may also seem to explain the contribution of a nonhead (more precisely, the 'head' for them). However, there are some serious problems in their approaches. Above all, their approaches are based on the ad hoc redefinition of the head, which would very conveniently identify the head of one and the same complex word in several different ways depending on the relevant features. The definition of the head in this way may turn out to be a tautology. Thus, it cannot explain our intuition about the headness that no matter which element decides some specific feature(s) in P-V CVs (i.e. in spite of some contribution of nonheads), it is still the simplex verb that is the head and the preposition is still just a nonhead prefix.

As a matter of fact, we don't have to resort to such an arbitrary redefinition of the head, which will bring about other subsequent problems, as in the percolation of the head features from a different head depending on the relevant feature(s), nor do we need to be grudgingly satisfied with a nice-looking but unjustified formalization which mainly serves to give the head (V) nominal priority. In fact, the obliqueness hypothesis can deal with even more difficult cases such as P-Vt CVs, in which both members of the CV contribute to the subcategorization inheritance. This is possible by better understanding the properties of 'headness' and the relevant head.[38]

4.2.2. Ditransitive P-Vt CVs Whose Simplex Verb is Monotransitive

The explanation of ditransitive P-Vt CVs formed from a preposition and a monotransitive simplex verb is more interesting. Although this type of compounding is not very common in OE, it is found in other languages including Greek and Latin as well as OE has some clear instances of P-Vt CVs formed by such compounding. Such P-V CVs provide us with very interesting positive evidence for the obliqueness hypothesis. Consider the following examples:

(18) *wiþ-metan* vs. *metan*

a. Hwylcum bigspelle *wiþmete* we hit?
which parable [dat] compare we it [acc]
'which parable shall we compare it with?'
(Mk. Skt. 4.30 [BT: 1254])

However, note that all the CVs which, she says, take accusative only in her examples describe motion rather than state, and also note that we find many P-Vi CVs which do not take accusative even though P can take accusative as well: for example, *wiþ-faran* [dat], *wiþ-springan* [dat], *wiþ-licgan* [dat], *ymb-fleogan* [dat], *ymb-springan* [dat], etc. (Visser 1963-73: 648-657).

[38] Note that Kim's (1997) approach adopting argument attraction, as is shown in (9), cannot be properly applied to the complex verbs which have a non-prepositional, (sub)category- or valence-changing prefix because there is no argument attraction from a nonhead (i.e. inseparable prefixes such as *a-*, *ge-*, *to-*) involved in such complex words. In this connection, it is important to note that as long as the original semantics of the simplex verb is not altered, the relative obliqueness among NP arguments tends to be maintained even when a simplex verb combines with an inseparable, non-prepositional prefix (e.g. *a-bitan* or *on-bitan* 'to taste of sth [gen]' from *bitan* 'to bite/tear sth [acc]').

b. (i) To *metenne wiþ* ðæt mod
to measure with that mind [acc]
'to measure/compare with that mind' (Bt. 16.2. Fox. 52.6 [BT: 681])

(ii) Ne sinthi no *wiþeow* to *metanne*
nor are they [nom] not with you [acc/dat] to compare
'they are not to be compared with you'
(Bt. 13. Fox. 40.10 [BT: 681])

c. þu gedydest ðætwe *mætan* ure land *mid* rapum,
you caused thatwe measure our land [acc] with cords [dat]
'you caused us to measure our land with cords'
(Ps. Th. 15.6 [BT: 681])

Examples (18b) and (18c) show that *metan* 'to measure, compare' usually takes an accusative NP and often occurs with a preposition *wiþ* or *mid* 'with' and a prepositional object NP, which is usually accusative or dative. When the simplex verb *metan* combines with the preposition *wiþ* to make a P-Vt CV, as in (18a), the whole P-Vt CV *wiþ-metan* 'to compare/measure one thing[acc] with/by another[dat]' becomes ditransitive and always takes accusative and dative. Here, we can clearly see that one of the two (non-subject) NP arguments in (18a) comes from P (nonhead) and that this prepositional argument is the dative NP but not the accusative NP because it is what something is compared with. What is interesting is that although the prefix *wiþ* as a preposition can take accusative, dative, or genitive, the P-V CV *wiþ-metan* only takes accusative and dative on its two objects, as in (18a).

None of the approaches we considered in section 2 seems to be able to provide a reasonable account of this subcategorization inheritance in *wiþ-metan*. For example, Kim (1997) and Lieber (1992) would say that the dative NP comes from P (*wiþ*) and it is inherited or composed by the head V (*metan*) of the whole CV. However, they would not be able to explain why the P-V CV only takes [acc, dat] even though [acc, acc] should also be logically possible. This means that there is much still to be explained about the mechanism of subcategorization inheritance, especially how the subcategorization inheritance is constrained and what role the head plays in that process.

The obliqueness hypothesis, on the other hand, very easily explains this phenomenon without weakening the priority of the head or resorting to an ad hoc and arbitrary redefinition of the head. That is, the simplex verb *metan*, whose case feature can be described as V[+nom, **+acc**, ¿dat, ¿gen], has the potential for inheriting a more oblique argument than its original accusative argument, and thus it comes to choose dative from among the actually possible options (i.e. [acc] and [dat]).[39]

Now let's consider another set of examples, in which the simplex verb *metan* combines with the preposition *be* 'by, in reference to' to make the P-Vt CV *be-metan* 'to measure one thing by another':

[39] The extant OE data seem to show that when the proposition *wiþ* occurs with *metan*, it only takes accusative or dative but does not take genitive even though it is possible in other cases. For the case government of the preposition *wiþ*, refer to BT, BTs, and Mitchell (1985).

(19) *be-metan* vs. *metan*

a. þæthy na siþþan nanes anwealdes hy ne
that they not afterwards not-any power [gen] themselves [acc] neither
bemætan, ne nanes freodomes,
measure-by nor not-any freedom [gen]
'that afterwards they did not consider themselves
(possessed) of any power, nor of any freedom'
(Mt. Bos. 62.11 [BT: 82])

b. þæthy heora miclan anwealdes and longsuman hy sylfe
that they their great power [gen] and lasting themselves [acc]
siþþan wiþ Alexander to nahte [ne] *bemætan*,
afterwards against Alexander at nothing measure-by
'that, in the respect of their great and lasting power,
afterwards they estimated themselves at nothing against Alexander'
(Mt. Bos. 65.39 [BT: 82])

c. Se sweg wæs *be* winde *metan*
the sound [nom] was by wind [dat] measured
'the sound was compared to/measured by the wind'
(BlHom. 133.31 [BT: 681])

As we considered in (18), the simplex *metan* takes accusative, which is also confirmed in (19c) since in OE only an accusative object NP could be a passive subject, and the preposition *be* 'by, in reference to' almost always takes dative, as in (19c), and occasionally takes accusative but never takes genitive.[40] Furthermore, the ditransitive P-Vt CV, which comes from the simplex *metan* and the preposition *be*, always takes accusative and genitive at the same time, as in (19a, b). What is interesting here is that although we expect the genitive case to come from P, the extant OE data do not show any example in which the corresponding preposition *be* takes genitive. Consider the following examples, in which some specific case taken by a P-V CV does not come from either the simplex verb (V) or the preverb (P):

(20) *on-cweðan* vs. *cweðan*

a. (i) þæthio þære cwene *oncweðan* meahton
thatshe the woman [dat/gen] speak-with-respect-to could
swa tiles, swa trages,
such good [gen], such bad [gen]
'that she could answer the woman with respect to
either such a good thing or such a bad thing'
(Elene 324 [Visser I: 610])

(ii) Drihten spræc ... Abraham Metode *oncwæð*,
the Lord spoke ... Abraham to God [dat] spoke-in-response
'the Lord spoke ... Abraham said to God in response'
(Gen. 2303 - 2345 [BT: 667])

[40] See Mitchell (1985: §§1183-4). Note also that, when it is an inseparable prefix, *be-* is usually privative or meaningless and never means 'by, in the respect of'.

b. Him þa word hi *cweðaþ*,
him [dat]the words [acc] they speak
'they say the words to him' (Exon. 13b. Th. 25.15 [BT: 178])

c. *cueð* ðaem eorð-crypple: aris.
spoke to the crippled [dat]
'I spoke to the crippled man' (Lindisf. Gosp. Mt. IX. 6 [Visser I: 289])

d. *on* [acc/dat/?**gen**] 'upon, with respect to, in accordance with' [41]

(21) *on-leon* vs. *leon*

a. þa he þæs wæpnes *onlah* selran sweord-frecan;
when he the weapon [gen] gave-the-loan-of(the) better sword man [dat]
'when he lent that weapon to the better swordsman' (Beo 1467)

b. Næs þæt þonne mætost mægen-fultuma,
not-was thatthen the least mighty aid
þæt him on ðearfe*lah* ðyle Hroðgares;
that him [dat] in need lent spokesman of Hrothgar
'then it was not the least of the might aid,
that Hrothgar's spokesman lent him in need' (Beo 1455-6)

c. Min lond þe ichæbbe, and me God *lah*
my land [acc] that I have, andme [dat] God lent
'my land that I have, and God lent me'
(Chart. Th. 469.25 [BT: 633])

d. *Lih* me þreo hlafas
lend me [dat] three breads [acc]
'lend me three loaves of bread' (Lk. Skt. Lind. 11.5 [BT: 633])

In the examples (20), *on-cweðan* 'to respond to somebody [dat] with respect to something [gen]' takes dative and genitive at the same time or dative alone, whereas the simplex verb takes accusative and dative at the same time, as in (20b), or separately but it does not take genitive. Thus, one might expect that the second case genitive for *on-cweðan* comes from the preposition *on*. However, the government of genitive by the preposition *on* is not well attested.[42] In the same way, *on-leon* 'to give somebody [dat] the loan of something [gen]' in (21a) takes dative and genitive while the simplex *leon* does not take genitive but does take accusative and dative. One might try to explain the case government in question by recourse to the comparative method.[43] But in this case, there does not seem to be any clear evidence that *on* and its cognates take a genitive object in the Proto-Germanic stage.[44]

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[41] See Mitchell (1985: §1178) for cases which are taken by the preposition *on*.

[42] According to BT, BTs, and Hall (1966), *on* does not take genitive but it only takes accusative, dative, or instrumental. But see Mitchell (1979: 40, fn. 2) for two examples in which *on* might be considered to take genitive.

[43] See Kim (1995). *Ofer-stigan* takes accusative or genitive while neither the simplex verb nor the preposition takes genitive. But the Gothic preposition *ufaro*, the cognate of OE *ofer* can take a genitive object, so that one can posit that *ofer* in Pre-English could govern genitive and *ofer-stigan* retains a trace of that behavior.

[44] The cognates of OE *on* (i.e. Gothic *ana*, Old Low Franconian *an*, Old High German *an(a)*, etc.) take accusative or dative respectively (Old High German *an(a)* sometimes takes instrumental), but do not take

According to the obliqueness hypothesis, the genitive case is allowed in both CVs since the genitive case is more oblique than the dative case which is specified for each simplex verb. Thus, we have two possible accounts: first, diachronically, the preposition in question used to be able to take genitive but with time this use became restricted until finally it does not take genitive any longer; and second (more synchronically), the P-V CVs in question take genitive as the second case since there is no other choice. No matter which position we take, the obliqueness hypothesis is compatible with each option: it can not only accommodate either possibility but also predict and explain it. In this connection, I believe that in general even a historically possible case could be allowed in compounds only when it is compatible with the more general principle like the OH. Thus, the OH is a principle that has diachronic as well as synchronic applications. Note also that the OH is also relevant to MnE, as already considered.

Finally, on the basis of the proposed hypothesis, I will reconsider the question raised about *wiþ*-CVs in section 1.2 and see how this approach can answer the question. The question is why a particular case is used in a P-V CV when more than one case is logically possible. Consider the following case government patterns for *wiþ-cweþan*, *wiþ-bregdan*, and *wiþ-standan*:

(22) Case Government of [wiþ-Vt] CVs, [Vt], and [wiþ] [45]

a. wiþ-bregdan [dat, (gen)] 'to restrain (sb/sth) [dat] from (sth) [gen]'
wiþ-cweþan [dat, (gen)] 'to refuse (sth) [gen] to (sb) [dat]'
wiþ-standan [dat, (gen)] 'to hinder (sb/sth) [dat] with respect to (sth) [gen]'

b. bregdan [acc/dat] 'to draw, bend'
cweþan [acc, (dat)] 'to say, speak'
standan ([dat]) 'to stand, become'

c. wiþ [acc/dat/**gen**]

The above OE *wiþ*-CVs show us some peculiar behavior in their case government. When they are used ditransitively, all the CVs in (22) take only [dat, gen] but they fail to take other combinations of cases, even though these are logically possible: [acc, acc], [acc, dat], [acc, gen], [dat, acc], [dat, dat]. How can we explain the case-government pattern in these P-Vt CVs?

According to the obliqueness hypothesis, no CVs can take an argument whose morpho-syntactic case is negative in the subcategorization of its head (simplex verb) through compounding. Thus, even if the nonhead P originally governs a certain case, if that case is less oblique than the marked case specified for the head, then it is negative and therefore cannot be inherited by the head or be percolated to the mother (CV). Note that in all three CVs, the dative case comes from the verb part (V), which is clear from the relevant meaning and the fact that the remaining case is genitive, which can be taken only by the P *wiþ*. Remember also that V[+dat] is equal to V[+dat, ((-acc, ¿gen))] in our re-interpretation of the case feature. Therefore, the only possible option for the second

genitive (Karg-Gasterstädt & Frings 1968, Balg 1887-1889, and Kyes 1983).

[45] This is based on Mitchell (1985: §§1092, 1178), Visser (1963-73: §677), BT, and BTs. For the discussion of the three P-V CVs, see Kim (1997).

argument which comes from the P should be the genitive case, which gives the argument structure V[dat, gen] for each P-Vt CV.

Then, why don't the above CVs take [acc, acc], [acc, dat], [dat, dat] or [acc, gen]? This can also be easily explained. Consider the following example again:

(23) *cweðan* and *wiþ-cweðan* (repeated from (5))

a.in leohtehim þa word *cweþað*
in light him [dat] those words [acc] speak
'they will speak those words to him in glory' (Christ 401)

b. gif inc hwa ðæs *wiþ-cweþe*
if you-two [dat] anyone that [gen] contradicts
'if anyone contradicts you about that' (BlHom 71.1 [BT: 1250])

The argument structures for *cweðan* and *wiþ-cweðan* are "addressee [dat], what-is-said [acc]", and "addressee [dat], what-is-spoken-about [gen]", respectively, which is apparent from the above examples in (23). Note that an addressee generally takes dative. Thus, once the case of the first NP (i.e. the original verbal argument) is determined as dative, the only remaining choice becomes genitive since genitive alone is more oblique than dative and potential in the case feature of the head verb.[46] Also note that all three *wiþ*-CVs have almost the same semantic and syntactic structure with a little difference in meaning in the verb part. Thus, even though more than one morphological case is logically possible, we can predict the right choice.

5. Summary and Conclusion

In this paper, we have considered the subcategorization inheritance, especially case feature inheritance, in OE CVs and demonstrated that the head of a word has more significance than generally assumed in many morpho-syntactic studies. Starting from the observation about the contribution of nonheads, which is very common but quite abnormal from the standpoint of the traditional notion of the head, we have examined various approaches available in current morphological theories only to find ourselves still

[46] One might want to treat the case government of *wiþ-cweðan* by means of a mapping from semantics or thematic roles to case categories as an alternative to the obliqueness hypothesis. The case government here, however, is difficult to explain in terms of semantics alone. Above all, the encoding of grammatical or semantic roles by morphological cases is often inconsistent. Note, in this connection, that in OE the same grammatical role or function is often represented by different morphological cases, as noted in (10) and (18). If we ignore this problem, the cases required for the addressee and the theme will exclude [acc, acc], [acc, dat], [acc, gen], and [dat, dat], since a theme or topic tends to take accusative or genitive and an addressee is generally encoded by dative, which is the case with *cweðan* and *wiþ-cweðan*. Yet, this still leaves [dat, acc] and [dat, gen]. Here the OH again helps us to choose between the remaining two by eliminating [dat, acc] which has a less oblique case than the dative case specified for the head verb.

On the other hand, one may try to resolve the problem of choosing [dat, acc] and [dat, gen] by arguing that the variation between accusative and genitive with the same verb is often due to the fact that accusative expresses the whole thing and the genitive a part (Mitchell 1985: §1340). Note, however, that although such a semantics-based account might be compatible with the semantic structure of the CV *wiþ-cweþan*, it is not clear how it could be applied to the semantic structures of other CVs such as *wiþ-bregdan* and *wiþ-standan*. This also makes it difficult to maintain a systematic application of mapping from thematic roles to case categories. See Kim (1997: fn.21) for another criticism on a semantic approach.

facing a dilemma between the contribution of a nonhead and the 'true' priority of the head. In order to remedy this situation, on the basis of the OH (obliqueness hierarchy), derived from the distinction between NP arguments with respect to their cases and governors, the enriched notion of the head, and the FCH (feature conservation hypothesis), we have proposed an alternative approach, in which we can consolidate the priority of the head as well as explain the contribution of a nonhead.

In short, the following advantages are obtained from the approach proposed in this paper. First, the obliqueness hypothesis can explain the contribution of a nonhead under the traditional notion of the head by showing that, despite the contribution of a nonhead, the head is still in complete control of the subcategorization inheritance in OE CVs. Second, the better understanding of the head suggests a reasonable answer to the question of why argument composition, which has recently been used in many morpho-syntactic studies, is possible and how it should be constrained. Finally, this approach, if it can be applied more generally, should enable us to provide a reasonable explanation and prediction about case government in OE, as we have seen in the previous section, and the prediction could contribute to the understanding of OE by accounting for many evasive grammatical relationships in which OE NPs and CVs are involved.

APPENDIXES [47]

APPENDIX I. OE VERBS WHICH GOVERN A GENITIVE NP ARGUMENT

anpracian 'to lament at sth'
basnian (*ge-*) 'to wait for sth'
blinnan (*a-* [gen], *ge-* [gen]) 'to cease from sth'
blissian (*efen-* [gen]) 'to rejoice at sth'
boeta(*n*) 'to acquire sth' (Matt (I.i) 18.15 (Mitchell 1985: §455))
bon 'to boast of sth'
dwelian, dwellan (*a-*, *ge-* [gen], *ofa-*) 'to go astray from sth'
efestan 'to strive after, undertake sth'
elcian 'to delay or put off sth'
fæstan (*a-*, *ge-*) 'to abstain from' [48]
(*ge-*)*felan* 'to feel, perceive, touch sb/sth'
(*ge-*)*feon* (*efen-* [gen]) 'rejoice at sth [gen/dat/instr]'
frasian (*ge-*) 'to tempt sb'
friclan 'to desire or seek for sth'

[47] The verbs and their definitions in the appendixes are based on Mitchell (1985: §1092). The following notations and abbreviations are used: (i) V[case$_1$/case$_2$] = the given verb takes either an NP [case$_1$] or an NP [case$_2$], and V[case$_1$, case$_2$] = the given verb takes two NPs whose case is [case$_1$] and [case$_2$], respectively; (ii) 'sth' and 'sb' stand for something and somebody, respectively; (iii) the complex verbs or P-V CVs which, in spite of the resemblance in form (and meaning), are not derived from a given genitive- or dative-governing simplex verb are given in the relevant footnote with an explanation; (iv) in case a simplex verb takes genitive or dative only with a specific meaning which is different from its default meaning, while it mainly or often takes accusative and/or dative with the default meaning, I separate the two uses of the verb and deal with the latter case in the relevant footnote.

[48] There are several OE words such as *ær-fæstan* 'to fix', *be-*, *bi-fæstan* 'to fix, inflict on', *ob-fæstan* 'to entrust, inflict', which are similar to *fæstan* [gen] only in form. However, as is clear from the involved meanings and forms, they all come from OE *fæstan* [acc] 'to fasten, entrust'.

giernan 'to ask for, desire sth'
gilpan (*for-*) 'to boast of, glory in sth [gen/instr]' (prep. *for*)
habban 'to consider sth' [49]
hentan (*ge-*) 'to pursue, follow sb/sth'
hlosnian 'to listen to, wait for sb/sth'
latian (*a-*, *ge-*) 'to delay from sth'
locian (*ge-*) 'to gaze on, examine, have regard to sb/sth' [50]
ge-nugan (*be-nugan* 'to need, enjoy sth [gen]') 'to suffice, have abundance of sth' [51]
nyttian (*ge-*) 'to make use of, enjoy sth'
pleon 'to risk or endanger sth'
ge-restan 'to rest from sth'
romian 'to strive after sth'
sætan, *sætian* (*be-*, *for-*) 'to lie in wait for sb' [52]
sætnian (*ge-* [dat]) 'to lie in wait for sb'
sciran (*a-* [acc, gen] 'to separate sb [acc] from sth [gen]') 'to get clear of, get rid of sth'
sinnan 'to care for, heed sb/sth'
slæpan (*ge-*, *on-*) 'to be asleep to, not to be alert to' [53]
þicgan (*a-*, *ge-*) 'to partake of sth'[54]
þorfnian (?) 'to suffer lack of sth' (See BTs)
wædlian 'to lack sth'
wafian 'to wonder at sth'
wandian (*a-*, *for-* 'to reverence', *un-*) 'to turn aside from sth' [55]
weddian (*ge-*) 'to engage to do sth'[56]

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[49] *Habban* has derivational words *a-habban* 'to restrain', *æt-habban* 'to retain', *be-habban* 'to surround, hold', *for-habban* 'to restrain', *ge-habban* 'to have, retain', *of-habban* 'to hold back', *on-habban*(?) 'to support', *wiþ-habban* [dat] 'to oppose', *wiþer-habban* 'to resist', *ymb-habban* 'to surround'. However, the involved meaning tells that these verbs come from *habban* [acc/gen] 'to have', which was one of the most frequently used OE verbs unlike *habban* [gen] 'to consider'.

[50] The verb *locian* is mainly used as intransitive and often occurs with a preposition *to* or *on*. BT and BTs show two derivational verbs for this verb *be-locian*, *ymb-locian* 'to look round'.

[51] Any verb shown as *ge*-V in the entries of this list always occurs as a prefixed form like *ge-nugan* .

[52] BTs shows one example in which *be-sætian* and *for-sætian* take an accusative NP as follows:

He forætade hie[acc.pl.] þær þær hie geþoht hæfdon þ hie hiene [acc.sg.] besætedon.
<insidiantes insidiis capit> (Or. 3. II; S 146. 11 [BTs: 82 & 250])

However, the two derived words *be-sætian* and *for-sætian* (= *for-setian*) have exactly the same meaning as *sætian* and furthermore, they are not well attested (BTs has only one example for the verbs, which is a Latin translation. Thus, it is very likely that the simplex *sætian* also takes accusative or that the example was influenced by Latin.

[53] *Slæpan* is mainly used as intransitive.

[54] *þicgan* has a complex verb *oþ-þicgan* 'to take sth[acc] from sb[dat]' but this word is not a counterexample since it does not come from the genitive-taking simplex verb *þicgan* 'to partake of sth'. That is, *þicgan*, when it means 'to take', is usually used as a transitive verb which can take accusative or dative, and thus we can say that the sth [acc] comes from this use of the simplex verb, which is clear from the meaning of the P-V CV 'to take sth [acc] from sb [dat]'.

[55] *Wandian* 'to care for' is used as intransitive with the preposition *for*.

ðū ne wandast for nānon menn
'you do not care for any men' (Mt. Kmbl. 22. 16 [BT])

[56] There is one related P-V CV *be-weddian* 'to betroth sb[acc] to sb[dat]', which does not come from the given genitive-taking verb. *Weddian* with the meaning of 'to wed, betroth' usually takes accusative (BT: 1181), which means that the accusative object comes from the simplex verb.

APPENDIX II. OE VERBS WHICH GOVERN A GENITIVE OR DATIVE NP ARGUMENT

andwyrdan (*ge-*) 'to answer (sth [acc] to) sb [dat]'
bicnan, *bicanian* (*and-*, *ge-*) 'to make a sign to sb'
bisenian, *bysnian*, (*ge-*, *mis-*) 'to give an example to sb [dat] of sth'
brycian, *brycsian* (*ge-*) 'to do good to sb/sth'
campian (*ge-*, *wiþ-*) 'to fight for sb/sth' (prep. *for*) [57]
cidan, *ge-* (*be-* 'to complain of', *ofer-* 'to chide sharply') 'to rebuke sb' [58]
ge-clifian 'to stick to sth' (prep. *to*) [59]
cweman (*ge-*, *mis-* 'to displease sb [dat?]') 'to please, satisfy sb'
ge-dafenian ((im)personal) 'to be becoming to, behoove sb/sth'
derian (*a-*, *ge-*) 'to hurt, damage sb/sth'
dryman 'to rejoice in sb'
dugan, *dygan* 'to befit, be of use to sb'
earmian (*of-*) 'to cause pity in sb' ((im)personal)
efnetan 'to eat as much as sb?, imitate?'
eglan, *eglian* (*æt-* [dat], *ge-* [dat]) 'to trouble' ((im)personal)
fægnian, *fagnian* (*ge-*, *on-*) 'rejoice at sth [gen/dat]' [60]
feligean 'to follow sb/sth'
ge-feolan (*æt-*, *be-*, *wiþ-*) 'to stick to sb/sth [61]
framian, *fremian*, *fromian* (*forþ-* 'to grow up, make progress') 'to profit, avail sb/sth' [62]
frodian 'to make sb wise'
(*ge-*)*fultuman*, *-ian* (*to*(*-ge*)*-*) 'to help, support sb/sth' [63]
(*ge-*)*fylstan* (*to-*) 'to help sb'
geocian (*un-*) 'to preserve, save sb/sth [gen/dat]'
gitsian (*ge-*) 'to covet, desire sth [gen/dat]'
godian 'to enrich sb'
gramian 'to be offensive to, vex sb'

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[57] *Wiþ-campian* 'to fight against' is likely to take accusative as transitive, even though BT, BTs and CA do not have the corresponding entry or any example for this P-V CV (only BT lists this CV and only as a derivation of *campian*). However, *campian* 'to fight against' is often used with a preposition *for*, *mid*, *wiþ* or *ongean* with an NP object [acc/dat], which means the simplex verb is an intransitive verb in this case. Thus, this verb cannot be a counterexample.

[58] *Cidan* can also take accusative and it is often used absolutely or intransitively with a preposition (*ongean* or *wiþ*) (BTs: 123). *Be-cidan* (only) occurs with a clause (BTs: 67) and furthermore, the meaning of *ofer-cidan* clearly tells us the prefix (*ofer*) is used not prepositionally but adverbially.

[59] *Clifian* 'to cleave, adhere' is usually used as intransitive with a preposition as follows:

Hī willaþ clifian on dæm monnum.
'they will cleave to the men' (Bt. 16.3; Fox 54.19 [BT])

[60] *Fægnian* is used as intransitive with the preposition *for* or *on* (BTs: 198).

[61] The simplex verb *feolan* 'to stick, adhere, come, pass' is usually used as intransitive. Note that all three CVs *æt-feolan* 'to adhere to sb/sth', *be-feolan* 'to apply oneself to sth', and *wiþ-feolan* 'to apply oneself to sth' have a similar meaning and take dative. On the other hand, *geond-feolan* 'to permeate, fill completely' comes from the transitive verb *feolan* 'to penetrate, pass into'.

[62] *Framian* 'to get good, make progress' is used as intransitive and it is clear from the meaning of the *forþ-framian* that the prefix *forþ-* is used adverbially, not prepositionally in that CV.

[63] *To-fultuman* 'adiuuare, adiuua' (tofultuma (A.lxxxi, 91, 10 [BTe:.60]) has the same meaning (and probably, the same usage) as the simplex.

hearmian (*of-* (impersonal) 'to cause grief' (Hall 1960)) 'to harm sb/sth'
(*ge-*)*helpan* (*a-* [dat/gen], *to-*) 'to help sb [dat/gen]' [64]
hiersumian (*ge-* [dat]) 'to obey, serve sb/sth'
(*ge-*)*hlystan* (*under-*) 'to listen to, obey sb [dat/gen]' [65]
hreman 'to exult in sth [dat/gen]' (in *Brun* 39)
hwopan 'to threaten sb [dat] with sth [dat/instr]'
hyrian (*æfter-*, *of-*, *on-*) 'to imitate sb/sth' [66]
laþian (*a-*) 'to be hateful to sb'
(*ge-*)*leogan* (*a-* [dat], *for-*, *of-*) 'to deceive, tell a lie to sb' [67]
libban (*mis-*, *ofer-*) 'to live to sb' (*libban* is mostly intransitive.)
(*ge-*)*lician* (*mis-*, *of-*, *un-ge-*) 'to please sb' (all verbs take dative.)
(*ge-*)*limpan* (*a-*, *be-*, *mis-*) 'to happen to sb' (all verbs take dative.)
linnan (*a-*, *ge-*, *b(e)-* [gen], *of-* 'to desist from sth [gen]') 'to cease from sth [dat/gen]'
losian (*ge-*) 'to be lost to, escape from sb/sth' (prep. *of*) [68]
lyffettan 'to flatter, pay court to sb'
magan 'to prevail over sb/sth' (prep. *wiþ*)
(*ge-*)metgian 'to assign due measure to sb'
migan (*ge-*) 'to pass, discharge sth [dat] in one's water'
(*ge-*)*miltsian* 'pity, pardon sb/sth [dat/gen]'
missan <1> [gen] 'to miss, fail to hit sth' <2> [dat] 'to escape the notice of sb'
(*ge-*)*neþan* 'to risk one's life'
(*ge-*)*nyhtsumian* 'to be sufficient for sb' ((im)personal)
ge-ortre(o)wan <1> 'to despair of sth [gen]' <2> 'not to trust to sb [dat] for sth (clause)'
ge-ortruwian 'to despair of sth [gen]'
plihtan 'to bring danger upon sb/sth'
racian 'to rule sb/sth'

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[64] The CV *to-helpan* is used in the same way as *helpan* as follows:

Ic gelēfo, help (tōhelpe, R. *adjuva*) ungeleáffulnise mīnne. (Mk. L. 9. 24 [BTs: 531])

[65] *Hlystan* is usually used as intransitive or absolutely (BT: 546 & BTs: 555) and *under-hlystan* 'to supply an omitted word (<*subadire*)' is a Latin translation.

[66] BT shows only one example, in which *æfter-hyrian* 'to imitate' is used as intransitive or absolutely but with exactly the same meaning as that of the simplex verb. BTs shows only one example for *of-hyrian* 'to imitate', in which it seems to take accusative (BTs: 662). *On-hyrian* [dat/acc] 'to imitate' might be problematic. De la Cruz, however, treats *on-* as an inseparable prefix, which seems to be relevant here since the prefix makes little semantic contribution to the given whole complex verb.

Anyway, exactly the same meaning in all the simplex and complex verbs argues that the prefix does not have a prepositional function in any CV. Furthermore, BT and BTs record only two examples for *hyrian*, whereas they have many examples for *on-hyrian*. and this insufficiency in data, together with the identical meaning involved, suggests the possibility that the simplex verb could also be used as intransitive. Visser (1963-73) does not include *hyrian* in the list of verbs which takes a dative NP. Considering all this, this word needs further research.

[67] *Leogan* 'to tell a lie' is mainly used as intransitive or transitive (mainly with a clausal object or an accusative NP). It takes a dative NP only when it means 'to tell a lie to sb'. BT and BTs record many examples for this verb.

[68] *Losian* is mainly used as intransitive and it is also used as transitive with an accusative NP when it means 'to destroy'. BT and BTs have many examples. There is one complex verb *for-losian* 'to destroy' which comes from the accusative taking transitive *losian*.

(*ge-*)*rædan* (*a-*, *be-*' to deprive sb [acc] of sth [dat/gen], *for-* 'to give counsel against', *mis-* 'to advise/read wrongly', *wiþ-* 'to act against [dat]') [69]
<1> [dat] 'to give advice to sb'
<2> [dat/instr] 'to rule, govern, direct sb'
<3> [dat] 'to possess sth'
(*ge-*)*sælan* (*to-* 'to happen amiss to sb [dat] in respect of sth [gen]') 'to happen to sb'
sceadan 'to part from sth [dat]' (in ***Ruin*** 30) [70]
scrifan (*ge-*) 'to care for sth [dat/gen]' [71]
spiwan, *spiwian* (*a-*) 'to split up, vomit sth'
(*ge-*)*spowan* (*mis-spowan* (impersonal) 'to turn badly for sb [dat]')
<1> [dat] 'to be successful in sth'
<2> (impersonal) 'to turn out well for sb [dat] in the respect of sth [gen] (*æt/mid/on*)'
stefnian (*ge-*) 'to summon, cite sb'
stelan (*be-* [dat], *ge-*, *for-* 'to steal away, rob') 'to steal from sb' [72]
sweltan (*a-*, *ge-*, *for-* (Vi) 'to die away, perish') [73]
<1> [gen] 'to die to, be no longer conscious of sth'
<2> [dat] (prep. *for/mid*) 'to die of sth, die a death'
(*ge-*)*swican*
(*a-* 'to betray sb [dat]', *be-* 'to fail sb [acc/dat]', *from-* 'to desert from sb [dat]') [74]
<1> [dat] (prep. *from*) 'to depart from sb'
<2> [dat/gen] (prep. *from*) 'to cease from sth'
<3> [dat] 'to betray, deceive sb'
tidan (*ge-*, *mis-* (impersonal) 'to turn out badly to sb [dat]') 'to happen to sb'
ge-timian (*miss-timian* [dat]) 'to happen, befall to sb'
trucian (*ge-*) 'to fail sb'
(*ge-*)*þancian* 'to thank sb [dat] for sth [gen]'

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[69] Two verbs originally distinct seem to coalesce under the form *rædan* (BT: 782). Thus, besides the usage above, The verb *rædan* takes accusative or is used as intransitive when it means 'to read'. Furthermore, even with the meaning 'to consult upon a matter [acc] with (*wiþ*) sb' it can take accusative. Note that the prefixes *a-*, *be-*, *for-*, *mis-* are just inseparable prefixes here, regardless of the origins of combined simplexes. The P-V CV *wiþ-rædan* 'to act against sb/sth [dat]', the origin of whose simplex is not clear, only takes dative. On the other hand, there is one P-V CV *ofer-rædan* 'to read over' which comes from the (in)transitive verb *rædan* 'to read (sth [acc])'. Thus, there's no counterexample here.

[70] The simplex verb *sceadan* 'to separate, divide' is mainly used as transitive (taking accusative) or as intransitive and it has derivational words, *a-*, (*be-*), *for-*, *ge-*, *of-*, (*ofer-*), and *to-sceadan*.

[71] *For scrifan* 'to condemn, proscribe sb [acc/dat]' comes from the simplex verb *scrifan* 'to decree, appoint, ordain, condemn' which takes accusative or dative. Furthermore, the prefix *for-* is not a preposition but an inseparable prefix, which is intensitive or pejorative.

[72] *Stelan* takes an accusative NP when it means 'to steal sth [acc] (from sb)'.

Wēnst þū, ðæt wē dīnes hlāfordes gold [acc.sg.] stælon (Gen. 44. 8 [BT: 915])

[73] *Sweltan* 'to die a natural or violent death' is used as intransitive and *for-sweltan*, whose preverb *for-* is an inseparable intensitive prefix, is also an intransitive verb:

Manig wīf forswilt for hire bearne [dat. sg. neut.].
'Many a woman dies because of her child' (Bt. 31. 1 [BT: 319])

[74] The only P-V CV *from-swican* takes dative. *Swican* 'to move about, depart, escape' is used as intransitive and furthermore, although it usually takes dative when as transitive it means 'to deceive sb', it seems, unlike Mitchell (1985: §1902), that it can also take accusative follows:

Se swiceþ þa menge [acc. sg. fem.]
'that man deceived the company' (In. Skt. Rush. 7, 12 [BT: 953])

þegan 'to acquire sth'
þegnian (*ge-, under-*) 'to serve, attend upon sb' [75]
þeowan, þeowian (*be-* 'to serve', *ge-, ni(e)d-*) 'to serve sb/sth'
(*ge-*)*þingian* (*for(e)-* 'to plead or intercede for', *oþ-* 'to usurp') [76]
<1> 'to plead for sb [dat]'
<2> 'to intercede for sb [dat] (or prep. *for*) with sb (prep. *wiþ*)'
(*ge-*)*þwærian* (*a-, mid-* 'to consent' (See BTe: 47))
<1> 'to consent to, conform to, agree to sth'
<2> 'to agree with sb [dat] (or prep. *mid*)'
(*ge-*)*þyncan* (*mis-* [dat], *of-* [dat], *on-* 'to appear') 'to seem, appear to sb' ((im)personal)
(*ge-*)*unan* (*of-unan* 'to begrudge, refuse to grant sb [dat] sth [gen]')
<1> 'to grant sb [dat] sth [gen/acc]'
<2>'to wish sb [dat] sth [gen]'
(*ge-*)*wifian* 'to marry sb' (absolute, or with reflexive [dat])
wrixlan (*be-* 'to change, exchange sth [dat]' (BTs: 89), *ge-*)
<1> [dat] 'to change sth' <2> [dat] 'to exchange sth'

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[*: Quoted by line. **: Quoted by page and line.]

ÆCHom i, ii. = Thorpe, B. (1844-46, 1971). *The sermones catholici* or *homilies of Ælfric.* 2 vols. London: The Ælfric society.**
ASPR = Krapp, G. P. and Dobbie, E. V. K. (1931-53). *The Anglo-Saxon poetic records: a collective edition.* 6 vols. New York: Columbia University Press.
Beo = Klaeber, F. (1922, 1928, 1936, 1941 & 1950). *Beowulf and the fight at Finnsburg.* Lexington, MA: D. C. Heath & Co.*
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EETS = Early English Text Society.
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[75] *Under-þegnian* 'to serve under' glosses Latin *subministrare.* BT and BTs have no further information.
[76] As we can see from the usage of *þingian*, the P-V CV *fore-þingian* comes from Vi + P (*þingian for*) and the prefix *oþ-* is not prepositional but means separation or departure as an (inseparable?) prefix (BT: 769; Hall 1960: 270).

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